

### 3-D IMAGING SYSTEM

#### ABSTRACT OF THE DISCLOSURE

An active three-dimensional imaging system for optical apparatus includes a  
5 relay lens subsystem with an off-axis rotating aperture placed between an imaging or  
objective lens and an image recording device such as a CCD camera. According to  
another aspect, the imaging system can include an off-axis rotating aperture located  
between field and aperture diaphragms of an illumination subsystem. The rotating  
aperture allows adjustable non-equilateral spacing between images of out-of-focus  
10 object points to achieve higher spatial resolution, increased sensitivity and higher sub-  
pixel displacement accuracy than other systems.